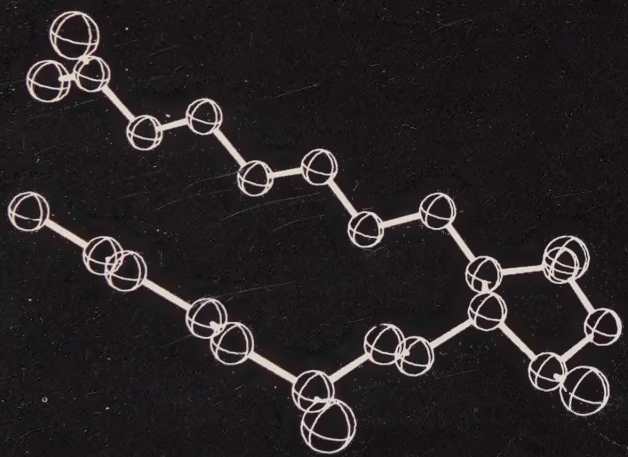
Vol. 22 1981
July - December

PROSTAGLANDINS



GERON-X

PROSTAGLANDINS

July 1981 Volume 22, Number 1

The Effect of Prostaglandin Synthetase Inhibitors on Renal Function: Studies in Normal Rats During Sodium or Water Diuresis and in Rats With Chronic Renal Insufficiency
A. Licht, B.E. Alpert, J.J. Bourgoignie and D. Schlondorff 1

Blunted Pulmonary Pressor Responses to Hypoxia in Blood Perfused, Ventilated Lungs Isolated from Oxygen Toxic Rats: Possible Role of Prostaglandins
J. H. Newman, I. F. McMurtry and J. T. Reeves 11

High Urine Flow Rate Increases Prostaglandin E Excretion in the Conscious Dog
L.F. Wright, S.G. Rosenblatt and M.D. Lifschitz 21

In Vitro Stimulation of Prostaglandin Synthesis in the Rat Pancreas by Carbamylcholine, Caerulein and Secretin
H. Bauduin, N. Galand and J.M. Boeynaems 35

Uterine Stimulant Action of Some ω-Chain Modified (±)-11-Deoxyprostaglandins
B.J. Broughton, M.P.L. Caton, A.J. Christmas, E.C.J. Coffee and D.J. Hambling 53

Regional Distribution of Arachidonic Acid Metabolites in Rat Brain Following Convulsive Stimuli
E. Berchtold-Kanz, H. Anhut, R. Heldt, B. Neufang and G. Hertting . . . 65

Stimulation of Platelet Protein Phosphorylation by Arachidonic Acid and Endoperoxide Analogs
J.M. Gerrard and R.C. Carroll 81

Prostaglandin E_2 Elevation of Cyclic-AMP in Granuloma Macrophages at Various Stages of Inflammation: Relevance to Anti-Inflammatory and Immunomodulatory Functions
I.L. Bonta, M.J.P. Adolfs and M.J. Parnham 95

Prostacyclin Stimulates the Adenylate Cyclase System of Human Thyroid Tissue
C. Patrono, C.M. Rotella, R.S. Toccafondi, S. Aterini, E. Pinca, A. Tanini and R. Zonefrati 105

The Regulatory Influence of Prostaglandins on Protein Synthesis in the Human Non-pregnant Cervix
A. Norstrom, L. Wilhelmsson and L. Hamberger 117

Influence of 6-keto-$PGF_{1\alpha}$ on Collagen Synthesis in the Human Cervix During Various Phases of the Menstrual Cycle
L. Wilhelmsson, A. Norstrom and L. Hamberger 125

Relationship Between Timing of Ovariectomy and Maintenance of Pregnancy in The Guinea Pig
A. I. Csapo, C. P. Puri and S. Tarro. 131

Investigation of the Vascular Actions of Arachidonate Lipoxygenase and Cyclo-Oxygenase Products on the Isolated Perfused Stomach of Rat and Rabbit
P. Salvati and B.J.R. Whittle 141

PROSTAGLANDINS

August 1981 Volume 22, Number 2

Effects of Prostaglandin E_1, I_2 and Isoproterenol on the Tissue Cyclic AMP Content in Longitudinal Muscle of Rabbit Intestine
N. Nakahata and T. Suzuki 159

Synthesis and Anti-Ulcer Activity of 16-Phenoxy Analogues of (±)-11-Deoxy-prostaglandin E_1
A.K. Banerjee, B.J. Broughton, T.S. Burton, M.P.L. Caton, A.J. Christmas, E.C.J. Coffee, K. Crowshaw, C.J. Hardy, M.A. Heazell, M.N. Palfreyman, T. Parker, L.C. Saunders and K.A.J. Stuttle 167

Inhibition of Arachidonic Acid-induced Contraction of Guinea Pig Lung Strips
S.S. Yen 183

The Effect of Cigarette Smoke on the Metabolism of Arachidonic Acid in Isolated Hamster Lungs
J. Männistö, H. Toivonen, J. Hartiala, Y.S. Bakhle and P. Uotila . . . 195

Distribution of Prostaglandin E_2 Binding Sites in the Porcine Gastrointestinal Tract
B.L. Tepperman and B.D. Soper 205

Leukotriene B_4: An Inflammatory Mediator In Vivo
M.A. Bray, A.W. Ford-Hutchinson and M.J.H. Smith 213

Effects of Prostaglandins on the Isolated Uterine Artery of Nonpregnant Women
L. Wilhelmsson, B. Lindblom, M. Wikland and N. Wiqvist 223

Cardiovascular Effects of Prostaglandin D_3 and D_2 in Anesthetized Dogs
M.G. Wendling and D.W. DuCharme 235

Effect of Prostaglandin Inhibition on Glomerular Filtration Rate in Normal and Uremic Rabbits
M.A. Kirschenbaum and E.R. Serros 245

In Vitro Effects of Synthetic Antioxidants and Vitamin E on Arachidonic Acid Metabolism and Thromboxane Formation in Human Platelets and on Platelet Aggregation
E. Agradi, A. Petroni, A. Socini and C. Galli 255

Prostacyclin (PGI_2) and U-46619 Stimulate Coronary Arteries from Diabetic Dogs and Their Action is Influenced by Inhibitors of Prostaglandin Biosynthesis
L. Sterin-Borda, M. Gimeno, E. Borda, E. del Castillo and A.L. Gimeno . 267

Stimulus-specificity of the Chemotactic Deactivation of Human Neutrophils by Lipoxygenase Products of Arachidonic Acid
E.J. Goetzl, J.M. Boeynaems, J.A. Oates and W.C. Hubbard 279

Prostaglandin E and $F_{2\alpha}$ Levels in Plasma and Amniotic Fluid During Mid-trimester Abortion Induced by Trichosanthin
Wang Y-F, Zhou W-D, Liu J-X, Fi C, Zhu W-X, Chen Y-Z, Yan L-M, Shen G-S, Wu Y-E and Zhu W. 289

9α-Homo-9,11-Epoxy-5,13-Prostadienoic Acid Analogues: Specific Stable Agonist (SQ 26,538) and Antagonist (SQ 26,536) of the Human Platelet Thromboxane Receptor
D.N. Harris, M.B. Phillips, I.M. Michel, H.J. Goldenberg, J.E. Heikes, P.W. Sprague and M.J. Antonaccio 295

A Rapid Simple Radiometric Assay for Phospholipase A_2 Activity
M. J. Cosentino and L.C. Ellis 309

Pulmonary Formation of Prostacyclin in Man
A. Edlund, W. Bomfim, L. Kaijser, C. Olin, C. Patrono, E. Pinca and A. Wennmalm 323

PROSTAGLANDINS

September 1981 Volume 22, Number 3

Effect of Bisenoic Prostaglandins on the Uterine Vasculature of the Nonpregnant Sheep
K.E. Clark, J.E. Austin and S.J. Stys 333

Preparation of Deuterated Arachidonic Acid
D.F. Taber, M.A. Phillips and W.C. Hubbard 349

OKY-1581: A Selective Inhibitor of Thromboxane Synthesis In Vivo and In Vitro
J.B. Smith and W. Jubiz 353

Isolation of Prostacyclin from Whole Blood
V. Skrinska and F.V. Lucas 365

Prostaglandin Secretion by Human Thymic Epithelium: In Vitro Effects of Steroids
F. Homo, F. Russo-Marie and M. Papiernik 377

Contraction of Isolated Airway Smooth Muscle by Synthetic Leukotrienes C_4 and D_4
R.D. Krell, R. Osborn, L. Vickery, K. Falcone and J. Gleason . 387

Effects of Cyclooxygenase Inhibitors and Prostaglandin E_2 on Macrophage Activation In Vitro
J. Schnyder, B. Dewald and M. Baggiolini 411

Enhancement of Isolated Airway Responses to Bronchoconstrictive Agonists by the Slow-reacting Substance of Anaphylaxis Antagonist FPL 55712
R.K. Krell, R. Osborn, K. Falcone and L. Vickery 423

The Effects of Prostacyclin (PGI_2) of Prolactin Secretion In Vitro
K.C. Wright and G.A. Hedge 433

Temporal Relationships Between Peripheral Plasma Concentrations of Oxytocin, Progesterone and 13,14-dihydro-15-keto-prostaglandin $F_{2\alpha}$ During the Oestrous Cycle and Early Pregnancy in the Ewe
R. Webb, M.D. Mitchell, J. Falconer and J.S. Robinson 443

Prostaglandins and Renin Release: III. Effects of PGE_1, E_2, $F_{2\alpha}$ and D_2 on Renin Release from Rabbit Renal Cortical Slices
A.R. Whorton, J.D. Lazar, M.D. Smigel and J.A. Oates 455

The Effects of Arachidonic and Other Fatty Acids on Canine Neutrophil Metabolism
B.R. Andersen, H.J. Amirault and G.C. LeBreton 469

Prostacyclin Production by Arterialized Autogenous Venous Grafts in Dogs
A. Eldor, E.L. Hoover, S.B. Pett, Jr., W.A. Gay, Jr.
D.R. Alonso and B.B. Weksler 485

Effects of Various Prostanoids on the In Vitro Metabolism of Bovine Articular Chondrocytes
D. Mitrovic, L. Lippiello, F. Gruson, F. Aprile and H.J. Mankin 499

PROSTAGLANDINS

October 1981 Volume 22, Number 4

Effect of Precursors of the 1,2 and 3 Series Prostaglandins on Renin Release and Renal Blood Flow in the Dog
J.F. Gerkens, A. Williams and R.A. Branch 513

Aggregation and Thromboxane B_2 Formation in Platelets and Vascular Prostacyclin Production from Genetically Obese Rats
M.M.C. Landgraf-Leurs, A. Loy, C. Christea, P.C. Weber, W. Siess, L.L. Herberg, R. Landgraf 521

Bone Resorption and Prostaglandin Production by Mouse Calvaria In Vitro: Response to Exogenous Prostaglandins and Their Precursor Fatty Acids
J.M. Katz, T. Wilson, S.J.M. Skinner and D.H. Gray 537

Prostaglandin D Synthase in Microvessels from the Rat Cerebral Cortex
M.E. Gerritsen and M.P. Printz 553

Opposition of the Vasopressin-induced Vasoconstriction in the Isolated Perfused Rat Kidney by Some Prostaglandins
C.R. Pace-Asciak and A. Rosenthal 567

Release of Prostaglandin I_2-like Activity from the Rat Aorta: Effect of Captopril, Furosemide and Sodium
J.M. Sullivan and D.R. Patrick 575

Evidence for a Dual Action of Converting Enzyme Inhibitor on Blood Pressure in Normal Man
R. Goldstone, K. Martin, R. Zipser and R. Horton 587

Actions of Indomethacin and Prostaglandins E_2 and D_2 on Nerve Transmission in the Nictitating Membrane of the Cat
D.P. Hemker and J.W. Aiken 599

Tetraene and Pentaene Leukotrienes: Selective Production from Murine Mastocytoma Cells after Dietary Manipulation
R.C. Murphy, W.C. Pickett, B.R. Culp and W.E.M. Lands 613

Measurement of Prostaglandins in Embryonic Tissue Using Radioimmunoassay
K.L. Klein, W.J. Scott and K.E. Clark 623

Circulating Concentrations of Oxytocin During the Estrous Cycle and Early Pregnancy in Sheep
E.L. Sheldrick and A.P.F. Flint 631

Spontaneous Motility and Prostaglandin Generation in Rat Uterine Horns Isolated During the Estrous Cycle
A.M. Franchi, M. Chaud, E.S. Borda, M.F. Gimeno, M.A. Lazzari and A.L. Gimeno 637

Modulation of Platelet Thromboxane A_2 and Arterial Prostacyclin by Dietary Vitamin E
C.W. Karpen, A.J. Merola, R.W. Trewyn, D.G. Cornwell and R.V. Panganamala 651

Arachidonate Metabolism in the Mouse Thyroid:Implication of the Lipoxygenase Pathway in Thyrotropin Action
S. Levasseur, F.F. Sun, Y. Friedman and G. Burke 663

Work in Progress: Ductus Arteriosus Closure May Result from Suppression of Prostacyclin Synthetase by an Intrinsic Hydroperoxy Fatty Acid
P. Needleman, S. Holmberg and B. Mandelbaum 675

PROSTAGLANDINS

November 1981 Volume 22, Number 5

Immunological and Non-immunological Synthesis and Release of Prostaglandins and Thromboxanes from Isolated Guinea Pig Trachea
J.F. Burka, M. Ali, J.W.D. McDonald and N.A.M. Paterson 683

Extraction and Purification of Prostaglandins and Thromboxane from Biological Samples for Gas Chromatographic Analysis
S. Goswami, J. Mai, G. Bruckner and J.E. Kinsella 693

Platelet-vessel Wall Interactions: Effects of Platelets and Plasma on the Anti-aggregatory Activity and 6-keto-$PGF_{1\alpha}$ Production in Isolated Perfused Aortas
C. Galli, A. Petroni, A. Socini, E. Agradi, C. Colombo, G.C. Folco and E. Tremoli 703

Inhibition of Na Transport by Prostacyclin (PGI_2) in Rabbit Cortical Collecting Tubule
Y. Iino and B.M. Brenner 715

Cell Growth and the Regulation of Prostaglandin Synthesis
L. Taylor and P. Polgar 723

Histamine, Endogenous Prostaglandins and Cyclic Nucleotides in the Regulation of Airway Muscle Responses in the Guinea Pig
C. Brink, P.G. Duncan and J.S. Douglas 729

Prostacyclin is not a Circulating Hormone
E. Christ-Hazelhof and D.H. Nugteren 739

Effect of Essential Polyunsaturated Fatty Acid Modifications on Prostaglandin Production by MDCK Canine Kidney Cells
M.G. Lewis, T.L. Kaduce and A.A. Spector 747

Rapid Return of Cyclo-oxygenase Active Platelets in Dogs After a Single Oral Dose of Aspirin
G.H.R. Rao, G.J. Johnson, R.K. Reddy and J.G. White 761

Sensitivity of Platelets to Prostaglandins in Coronary Heart Disease and Angina Pectoris
H. Sinzinger, G. Schernthaner and J. Kaliman 773

Treatment of Chronic Kidney Transplant Rejection with Prostacyclin - Reduction of Platelet Deposition in the Transplant; Prolongation of Platelet Survival and Improvement of Transplant Function
C. Leithner, H. Sinzinger and M. Schwarz 783

Effects of Prostacyclin on Ultrastructural Features of Human Platelets In Vitro
G. Weber, G. Bianciardi, P. Toti and H. Sinzinger 789

Serum Lipoproteins, Lipid Peroxides and Prostacyclin Biosynthesis in Patients with Coronary Heart Disease
A. Szczeklik, R.J. Gryglewski, B. Domagala, A. Zmuda, J. Hartwich, E. Wozny, M. Grzywacz, J. Madej and T. Gryglewska 795

Omega Chain Methylated Analogs of $PGF_{2\alpha}$ and PGE_2
N.H. Andersen, N. Subramanian, S. Imamoto, D.H. Picker, D.W. Ladner, D.A. McCrae, B. Lin and B. De 809

Synthesis of Macrolide Prostaglandin Analogs
N.H. Andersen, S. Imamoto and N. Subramanian 831

Molecular Basis for Prostaglandin Potency. III. Tests of the Significance of the "Hairpin Conformation" in Biorecognition Phenomena
N.H. Andersen, S. Imamoto, N. Subramanian, D.H. Picker, David W. Ladner, B. De, S.S. Tynan, T.L. Eggerman, L.A. Harker, R.P. Robertson, H.G. Oien and Ch.V. Rao 841

PROSTAGLANDINS

December 1981 Volume 22, Number 6

Human Umbilical Blood Vessel Converts All Cis-5,8,11,14,17 Eicosapentaenoic Acid to Prostaglandin I_3
J. Dyerberg, K.A. Jørgensen and T. Arnfred 857

Rabbit Renal Cortical Microsomes Metabolize Arachidonic Acid to Trihydroxyeicosatrienoic Acids
E.H. Oliw and J.A. Oates 863

A Proposed Role for Prostaglandins in the Modulation of the Relaxation Response to Urotensin I in Isolated Rat Arteries
M.E. Gerritsen, D.O. Morgan, T. P. Parks, M.P. Printz and K.P. Lederis 873

Interaction Between Prostaglandins of the E-type with a Urinary Component from Halothane Anaesthetized Rats
P. Christensen and N. Holstein-Rathlou 893

Influence of Prostaglandin $F_{2\alpha}$ on Sperm Production and Seminal Characteristics of the Stallion
J.L. Kreider, W.L. Ogg and J.W. Turner 903

Metabolism of PGI_2 by 15-Hydroxyprostaglandin-dehydrogenase and Δ^{13}-Reductase in Different Vascular Beds of the Cat In Vivo
U. Forstermann, B. Neufang and G. Hertting 915

Localization of Exaggerated Prostaglandin Synthesis Associated with Renal Damage
M.G. Currie, B.B. Davis and P. Needleman 933

Central Cardiovascular and Thermal Effects of Prostacyclin in Rats
A. Siren 945

A New Prostaglandin E_1 Analogue (CL-115,574) I. Antisecretory and Cytoprotective Effects in the Rat
J.E. Birnbaum, D. E. Wilson, R. Partridge, W. Scruggs, A.E. Sloboda and S. Mourillon 957

A New Prostaglandin E_1 Analogue (CL-115,574) II. Effects on Gastric Acid Secretion in the Dog
D.E. Wilson, W. Scruggs and J.E. Birnbaum 971

Some New Prospects in the Mechanism of Control of Arachidonate Metabolism in Human Placenta and Amnion
M.J. Dembele-Duchesne, H. Thaler-Dao, C. Chavis and A. C. de Paulet 979

Blood Pressure and Heart Rate Effects of Prostaglandin E_2 and $F_{2\alpha}$ Produced by Intracerebroventricular Injections in Cats
R.A. Gillis, J.A. Quest, J.D. Souza, P.A. Kot and P.W. Ramwell. . 1003

REVIEW: Bronchoactive Metabolites of Arachidonic Acid and Their Role in Airway Function
E.W. Spannhake, A.L. Hyman and P.J. Kadowitz 1013

Digitized by the Internet Archive
in 2023 with funding from
Kahle/Austin Foundation

https://archive.org/details/prostaglandins_1981_22_contents